

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING STRAIN POLE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 162 (AVIATION BOULEVARD) AND ALLWOOD DRIVE IN ANNE ARUNDEL COUNTY. THE EXISTING PEDESTRIAN PHASE ACROSS THE WEST LEG OF THE INTERSECTION SHALL BE UPGRADED TO A COUNTDOWN PEDESTRIAN PHASE WITH AUDIBLE PUSHBUTTONS. A NEW PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE SOUTH LEG OF MD 162 WITH COUNTDOWN PEDESTRIAN HEADS WITH AUDIBLE PUSHBUTTONS. MD 162 (AVIATION BOULEVARD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

1. THE INTERSECTION SHALL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE. WITH THE MD 162 (AVIATION BOULEVARD) APPROACHES OPERATING CONCURRENTLY. THE EXCLUSIVE/PERMISSIVE LEFT TURN PHASES FOR BOTH APPROACHES OF MD 162 (AVIATION BOULEVARD) SHALL CONTINUE TO BE PROVIDED. THE PEDESTRIAN PHASE ACROSS THE WEST LEG OF THE INTERSECTION SHALL NOW BE A COUNTDOWN PEDESTRIAN PHASE WITH AUDIBLE PUSHBUTTONS ON RECALL. A NEW PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE SOUTH LEG OF MD 162 WITH COUNTDOWN PEDESTRIAN HEADS WITH AUDIBLE PUSHBUTTONS. THE ALLWOOD DRIVE / DRIVEWAY APPROACHES SHALL ALSO CONTINUE TO OPERATE CONCURRENTLY.

2. THE EXISTING FULL TRAFFIC EIGHT PHASE CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A NEMA SIZE 6 BASE MOUNTED CABINET SHALL BE UTILIZED AT THIS INTERSECTION

3. SHA SIGNAL SHOP SHALL INSTALL APS CONTROL UNIT INTO CONTROLLER CABINET. THE CONTRACTOR SHALL DELIVER THE CONTROL UNIT AND AUDIBLE PUSHBUTTONS TO THE SHA SIGNAL SHOP FOR TESTING.

III. SPECIAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES, TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.

2. ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES A CONFLICT BETWEEN UTILITIES AND SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.

EQUIPMENT LIST

A.EQUIPMENT TO BE SUPPLIED BY SHA

ITEM NO.	QUANTITY	DESCRIPTION
9570	36 SF	SHEET ALUMINUM GROUND MOUNTED SIGN - 2 EACH R9-5 SIGN (12"x18") - 4 EACH W11-1(1) (30"x30") - 2 EACH W16-7(p)L (24"x12") B/FY - 2 EACH W16-7(p)R (24"x12") B/FY
9571	4 SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN - 4 EACH R10-3(1) SIGN (9"x15")

B.EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	4 EACH	TEST PIT
5001	1 EACH	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS SYMBOLS OR LEGENDS
5003	300 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	460 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	45 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	16 SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS
6001	240 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1060 SF	5 INCH CONCRETE SIDEWALK
6003	100 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8002	1 EACH	2-WIRE CENTRAL CONTROL UNIT
8008	4 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	4 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8018	4 EACH	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8033	30 LF	1" DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8043	95 LF	UP TO 4 INCHES SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8044	64 LF	WOOD SIGN SUPPORTS UP TO 4"x6"
8045	40 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	120 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	970 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	955 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8062	760 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8063	225 LF	SAWCUT FOR SIGNAL (LOOP DETECTOR)

C.EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR

The contact persons for District #5 and SHA are as follows:

Ms. Kim Tran  
Assistant District Engineer - Traffic  
Phone: (410) 841-1019

Mr. Joe Geckle  
Assistant District Engineer - Maintenance  
Phone: (410) 841-1000

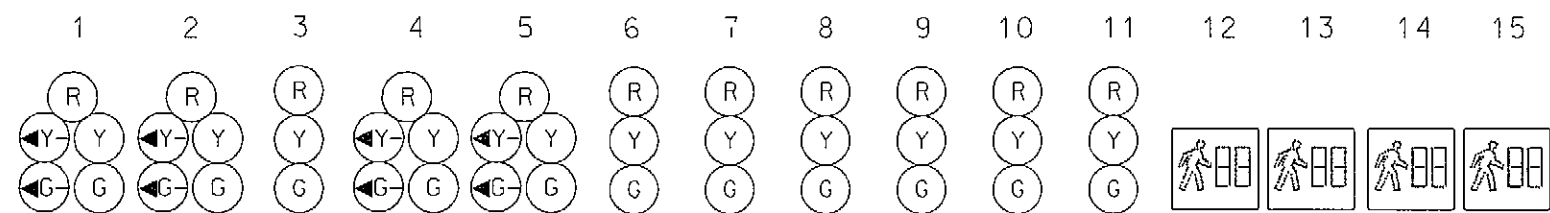
Mr. Mike Huber  
Assistant District Engineer - Utility  
Phone: (410) 841-1039

Mr. Avijit Maji  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

Mr. Ed Rodenhizer  
Manager, Signal Operations Section  
410-787-7652

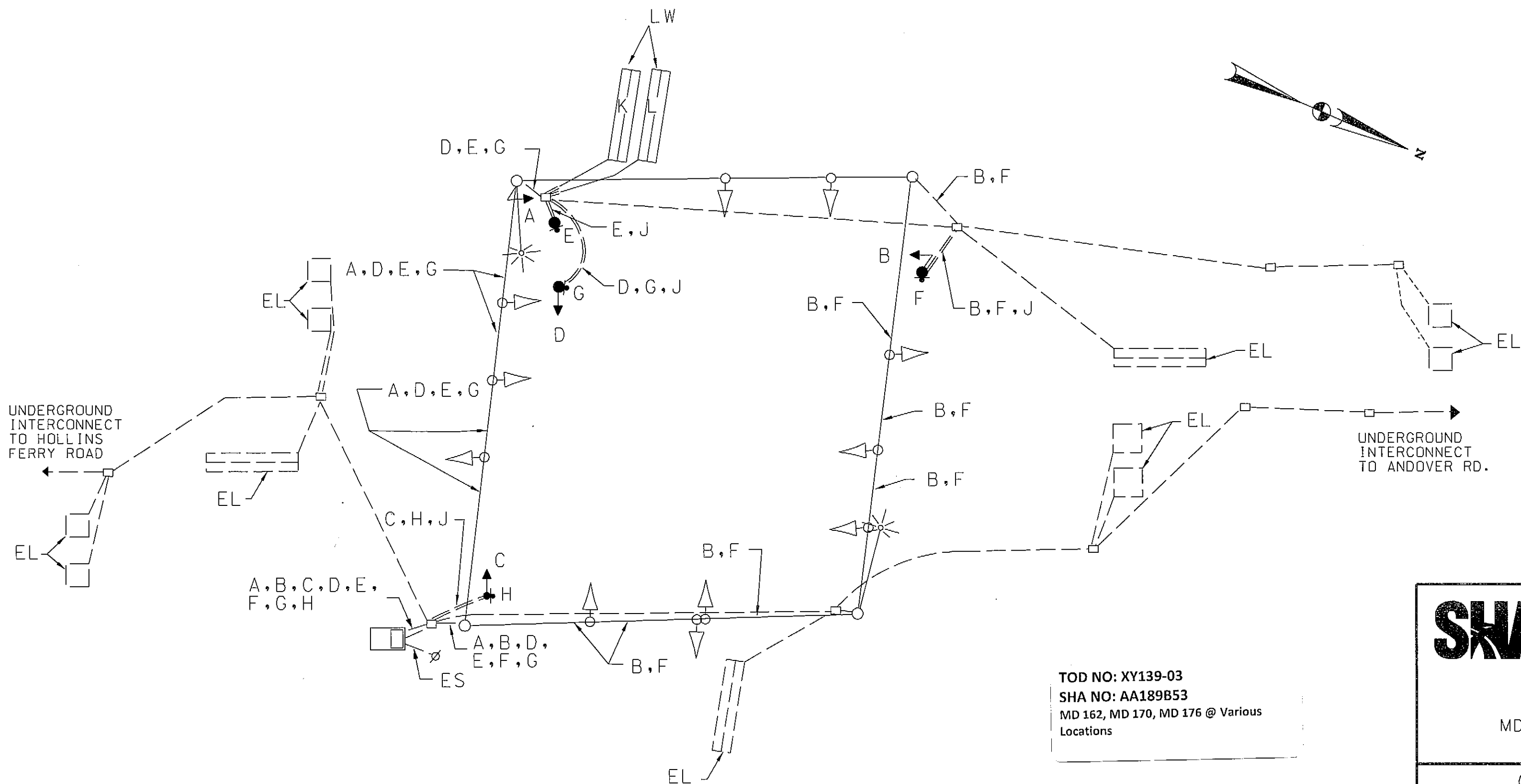
Mr. Sonny Bailey  
Manager, Sign Shop Operations  
410-787-7676

PHASE CHART



PHASE 1 & 5			R			R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																			
PHASE 1 & 6			G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
1 & 6 CHANGE			G			R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 2 & 5	R	R	R			G	R	R	R	R	R	R	R	R	WK	WK	DW	DW	
2 & 5 CHANGE	R	R	R			G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	R	R	WK	WK	DW	DW	
PED CLEAR (COUNTDOWN)	G	G	G	G	G	G	R	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	G	G	DW	DW	DW	DW	
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	G	G	DW	DW	WK	WK	
PED CLEAR (COUNTDOWN)	R	R	R	R	R	R	G	G	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW	
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

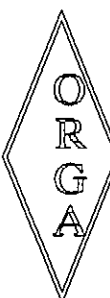
WIRING DIAGRAM



WIRING KEY

- A, B, C, D, E, F, G, H, J, K, L, LW, ES
- 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- STANDARD BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- LOOP WIRE, SPliced TO EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- EXISTING LOOP WIRE (NO. 14 A.W.G.)
- LOOP WIRE (NO. 14 A.W.G.)
- EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY BGE

TOD NO: XY139-03  
SHA NO: AA189B53  
MD 162, MD 170, MD 176 @ Various Locations



**O. R. GEORGE & ASSOCIATES, INC.**  
Traffic Engineers - Transportation Planners  
10210 Greenbelt Road, Suite 310  
Lanham, MD 20706  
(301) 794-7700



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 162 (AVIATION BOULEVARD) AT ALLWOOD DRIVE  
HANOVER, MARYLAND

GENERAL INFORMATION PLAN

SCALE 1"=20' DATE 2/6/2013 CONTRACT NO. XY1395185

DESIGNED BY A. BEKELE COUNTY ANNE ARUNDEL  
DRAWN BY O. GEORGE LOGMILE 02016201.10  
CHECKED BY [Signature] TMS NO. L653  
F.A.P. NO. TOD NO.

TS NO. 3192D DRAWING TSP-3 OF 3 SHEET NO. 15 OF 33